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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,072	04/20/2004	Andrew Harvey Barr	200208446-1	6038

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EXAMINER

WANG, ALBERT C

ART UNIT	PAPER NUMBER
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2115

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/829,072

Applicant(s)

BARR ET AL.

Examiner

Albert Wang

Art Unit

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Original claims 1-20 are pending.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No.

10/678,657. Although the conflicting claims are not identical, they are not patentably distinct from each other because changing performance of rack equipment is an obvious variation of changing power consumption and thermal load of rack equipment. Independent claims 1, 8, and 15 of the instant application correspond, respectively to claims 8, 1, and 14 of the pending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2-6, 16 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "said altering said rack equipment performance settings". Claims 3 and 4 recite the limitation "said capacity demand plan". Claim 5 recites the limitation "said change in said performance". Claim 6 recites the limitation "said controlling said operation". Claim 16 recites the limitation "said adjustments commands". Claim 20 recites the limitations "said telemetry monitoring module" and "said performance adjustments commands". There is insufficient antecedent basis for these limitations in the claims.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 8-19 are rejected under 35 U.S.C. 102(b) as being anticipated by K.

Rajamani and C. Lefurgy, "On Evaluating Request-Distribution Schemes for Saving Energy in Server Clusters", In Proceedings of the IEEE International Symposium on Performance Analysis of Systems and Software, March 2003 (hereinafter "Rajamani").

Art Unit: 2115

As per claim 1, Rajamani teaches a method of dynamically changing rack capacity on demand, said method comprising:

receiving a rack equipment capacity alteration request (secs. 3.3 & 3.4; sec. 4.2, Request distribution);

performing an analysis of said rack equipment capacity alteration request (sec. 4.2, performing PARD algorithms); and

changing performance of rack equipment in accordance with said analysis of said rack equipment capacity alteration request (sec. 4.2, changing performance of servers).

As per claim 8, Rajamani teaches a rack equipment capacity on demand system comprising:

rack equipment for processing data (sec. 4.1, server blades);

a capacity demand plan component for controlling operational changes to said rack equipment based on a capacity demand plan (sec. 4.1, management blade; sec. 4.2); and

a communications bus for coupling said equipment and said capacity control component, wherein said communications bus is utilized for communicating information between said capacity control component and said rack equipment (sec. 4.1, I2C bus).

As per claim 9, Rajamani teaches said capacity demand plan component controls the amount of rack equipment resources assigned to an application (sec. 4.2).

As per claim 10, Rajamani teaches said capacity demand plan component switches on and off said rack equipment in accordance with said capacity demand plan (secs. 4.1 & 4.2).

As per claim 12, Rajamani teaches said capacity demand plan policy is dynamically adjustable on the fly (sec. 4.2).

As per claim 13, Rajamani teaches said capacity demand plan policy is structured in accordance with business needs of a client (sec. 3.4).

As per claim 14, Rajamani teaches a memory for storing equipment information and capacity demand plan information; and a cross indexing component for cross indexing said equipment information and said capacity demand plan policy information (sec. 4.1).

As per claim 15, Rajamani teaches a computer-useable storage medium comprising computer-readable program code embodied therein for causing a computer system to implement a power pricing performance instructions comprising:

a capacity demand detection module for detecting indications of requests for capacity demand changes covered by a capacity demand plan (sec. 4.2, Request distribution);

a capacity demand administration module for administering examination of capacity demand changes (sec. 4.2, Managing server power-states); and

an instruction generation module for generating rack equipment performance adjustment commands to implement said capacity demand plan instructions (sec. 4.1, for management blade commands).

As per claim 16, Rajamani teaches a telemetry monitoring module for monitoring characteristics and activity of rack equipment associated with said adjustments commands (sec. 4.1).

As per claim 17, Rajamani teaches an event spawning module for generating power pricing events (sec. 4.4).

As per claim 18, Rajamani teaches said instruction generation module comprises functionality for generating a command to postpone processing (sec. 4.4).

As per claim 19, Rajamani teaches said capacity demand plan information is an agreement between a host and a client and is structured in manner to accommodate business activities of said client (sec. 4.2).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rajamani as applied to claim 1 above, and further in view of Kanemaki et al., U.S. Pub. No. 2002/0174228 (hereinafter "Kanemaki").

As per claim 7, Rajamani does not expressly teach that verifying a payment associated with said rack equipment capacity alteration request is made. Kanemaki teaches that verifying payment for network access is a known business practice (pars. 0313-0317). At the time of the invention, it would have been obvious to one of ordinary skill in the art to apply Kanemaki's teachings to Rajamani's method, as verifying payment for network access is well known in the art.

Art Unit: 2115

9. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rajamani as applied to claim 8 above, and further in view of Brock et al., U.S. Patent No. 6,836,849 (hereinafter "Brock").

As per claim 11, Rajamani does not expressly teach a master management control center for coordinating control of rack equipment among a plurality of racks. Brock teaches such a master management control center (col. 7, lines 24-64, controller 201). At the time of the invention, it would have been obvious to one of ordinary skill in the art that Brock's control center is applicable to a system of multiple racks, as centralized control is well known in data centers.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert Wang whose telephone number is 571-272-3669. The examiner can normally be reached on M-F (9:30 - 6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2115

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AW



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